

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 October 2004 (14.10.2004)

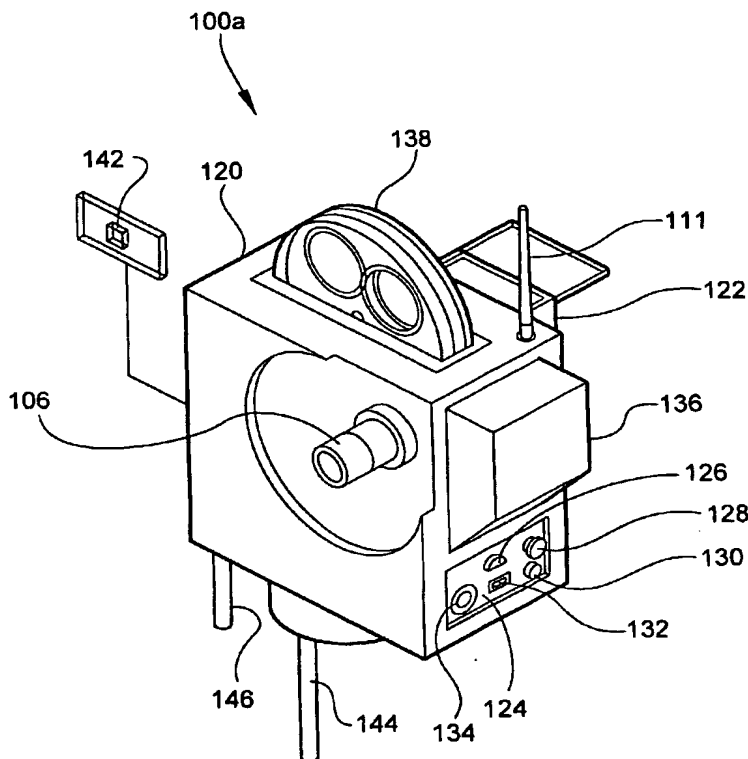
PCT

(10) International Publication Number
WO 2004/086941 A3

- (51) International Patent Classification⁷: **C12Q 1/04**, 1/02, C12M 1/34, 3/00
- (21) International Application Number: **PCT/US2004/009172**
- (22) International Filing Date: 25 March 2004 (25.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/458,769 27 March 2003 (27.03.2003) US
60/505,944 25 September 2003 (25.09.2003) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR RAPIDLY IDENTIFYING PATHOGENS, BACTERIA AND ABNORMAL CELLS



(57) Abstract: The present invention achieves rapid identification of pathogens, bacteria, cancer cells and other abnormal human and animal cells. In one embodiment, the system of the present invention comprises a first subsystem that obtains and processes images of specimens of pathogens, bacteria, and other abnormal cells, and a second subsystem that accepts the images, isolates the particular features of the image using advanced image segmentation, and then rapidly and accurately identifies the pathogens, bacteria and other abnormal cells by using a pattern recognition process wherein the segmented or isolated features of the original image are compared to known reference images.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

(88) Date of publication of the international search report:

23 December 2004

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/09172

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C12Q 1/04, 1/02; C12M 1/34, 3/00 US CL : 435/34, 29, 287.1, 288.7 According to International Patent Classification (IPC) or to both national classification and IPC																	
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/34, 29, 287.1, 288.7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST																	
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US 5,742,700 A (YOON et al) 21 April 1998 (21.04.1998), see entire document.</td> <td>1-8, 10-23</td> </tr> <tr> <td>Y</td> <td></td> <td>9, 24-26</td> </tr> <tr> <td>Y</td> <td>US 5,627,907 A (Gur et al) 06 May 1997 (06.05.1997), see entire document.</td> <td>1-26</td> </tr> <tr> <td>Y</td> <td>US 2002/0165837 A (ZHANG et al) 07 November 2002 (07.11.2002), see entire document.</td> <td>1-26</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 5,742,700 A (YOON et al) 21 April 1998 (21.04.1998), see entire document.	1-8, 10-23	Y		9, 24-26	Y	US 5,627,907 A (Gur et al) 06 May 1997 (06.05.1997), see entire document.	1-26	Y	US 2002/0165837 A (ZHANG et al) 07 November 2002 (07.11.2002), see entire document.	1-26
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<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																	
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"P" document published prior to the international filing date but later than the priority date claimed																	
Date of the actual completion of the international search 05 October 2004 (05.10.2004)		Date of mailing of the international search report 03 NOV 2004															
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Christopher R. Tate <i>John Jackson</i> Telephone No. 703-308-0196															